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Global Impact Review

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List of Acronyms and Abbreviations

ANPE	Agence Nationale de Protection de l'Environnement
ARRU	Agence de Rehabilitation et de Renovation Urbaine
BOT	Build, Operate, Transfer
CNPRCRM	Centre National de Perfectionnement et de Recyclage des Cadres Regionaux et Municipaux
CPSCCL	Caisse des Prets et de Soutien aux Collectivites Locales
DGCPL	Direction Generale des Collectivites Publiques Locales
FOCRED	Fonds de Credits Environnementaux
FODEP	Fonds de Depollution
GCP	Gestion Communautaire Participative
GESCOME	Projet Gestion Communautaire de l'Environnement
GOT	Government of Tunisia
GTZ	German Cooperation Agency
HG	Housing Guaranty
LGSP	Local Government Support Program
MEAT	Ministere de l'Environnement et de l'Amenagement de Territoire
MEH	Ministere de l'Equipement et de l'Habitat
NGO	Non-Governmental Organization
ONAS	Office National de l'Assainissement
PACT	Policy Action and Cooperation Timetable
PDM	Municipal Development Program
PPES	Private Participation in Environmental Services
RHUDO	Regional Housing and Urban Development Office

Table of Contents

List of Acronyms and Abbreviations	1
Table of Contents	2
1 Executive Summary	3
2 Project Description	4
3 Results	4
3.1 Accomplishments	4
3.2 Achievement of Program Objectives	6
3.3 Achievement of RHUDO Strategic Objectives	8
4 Detailed Discussion of Selected Elements of Program	8
4.1 Solid Waste	8
4.2 Liquid Waste	9
4.3 Land Development	10
4.4 Financing of Environmental Services	11
4.5 Community Participation	13
5 Sustainability of Program Achievements	14
5.1 Assessment of Sustainability	14
5.2 Recommended Actions to Encourage Sustainability	15
6 Lessons	15
Tables	
1 Program Costs	
2 Program Outputs	
3 Program Studies	
4 ONAS	

1 Executive Summary

This is an evaluation of the Private Participation in Environmental Services Program (PPES). This policy based program was sponsored and funded by the Government of Tunisia and the United States Agency for International Development. Financing consisted of \$40 million in Housing Guaranty Loans (HG-V) and \$3.7 million in grants. The evaluation was carried out in conjunction with the fourth annual progress review, undertaken during May and June 1997. A final project workshop was also held, attended by sixty high and mid-level government officials and private sector representatives who had actively participated in the program.

The PPES program began in 1993. Its goal was to support Tunisian economic growth and social stability through improved environmental and shelter conditions in urban areas, particularly low income neighborhoods. The purpose of the policy based program was to improve the coverage and efficiency of urban environmental services, broadly defined, through increased participation of the private sector. PPES had four objectives: (1) strengthen the capacity of the private sector to provide urban environmental services in poorly serviced low income residential neighborhoods; (2) strengthen the role of the private sector in financing these services; (3) strengthen the institutional capacity of the public sector to manage this enhanced private sector participation, and; (4) strengthen community participation in this process, particularly through NGOs.

Global results are generally positive. There has been a remarkable evolution in Tunisia in the acceptance and the use of the private sector in the provision of environmental services. However, each objective needs to be looked at in detail, because some were more successful than others.

The evaluation of the Program was complicated by the decision to curtail most US inputs to the project after only 4 years, instead of the 5-6 originally planned. Thus, results to date of each of the objectives did not present a true picture of global program impact. In spite of this, many of the anticipated Project Outputs set forth in the Project Paper were achieved, and the purpose of the project was clearly advanced.

For those components that have already proved successful, it is recommended that the Government move decisively to expand the role of the private sector. In particular, it is recommended that ONAS move beyond pilot projects and vigorously expand its use of the private sector. The evaluation also concludes that special efforts should be made to increase the role of the private sector in financing environmental services. The Caisse des Prets et de Soutien des Collectivites Locales (CPSCL) should move expeditiously to finance commercially viable municipal activities using resources raised in the private financial sector. Finally, the evaluation recommends that the coordination structure put in place for the program be maintained and strengthened to promote the sustainability of program achievements.

2 Project Description

The Private Participation in Environmental Services (PPES) Program began in 1993. Its goal was to support Tunisian economic growth and social stability through improved environmental and shelter conditions in urban areas, particularly low income neighborhoods. It has been called three projects in one, with major activities in the liquid waste, solid waste, and land development environmental sub-sectors. PPES was funded by a \$40 million USAID Housing Guaranty (HG) loan and \$3.7 million in grants, of which \$600,000 came from the Government of Tunisia (GOT) as a contribution from the USAID/GOT Commodity Import Program (CIP).

The purpose of the PPES program was to improve the coverage and efficiency of urban environmental services, broadly defined, through increased participation of the private sector. This was a policy based program, the first of its kind in the region. HG disbursements were conditioned upon adequate progress being achieved by the government on a "Planning Action and Cooperation Timetable (PACT)" that was designed to enhance the role of municipalities and the private sector in the provision of environmental services. Annual progress reviews were conducted by USAID and the government to determine whether the goals for that year had been met and to set new goals for the coming year. HG loans funds provided budgetary support for government programs to improve environmental infrastructure in low-income neighborhoods. While HG funds went directly to support government programs to improve conditions on the ground, both HG and grant funds were intended to support the creation of an enabling structure of policies, incentives, and institutions to increase private sector participation in the provision of environmental services.

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The PPES approach was characterized by: (1) direct support for government programs to improve environmental conditions in poorly serviced low income residential neighborhoods, and; (2) studies, pilot projects, and evaluations intended to demonstrate that Tunisia could improve its environmental situation through increased participation by the private sector and local communities.

3 Results

3.1 Accomplishments

The PPES program had a number of concrete achievements. Under its HG component, \$40 million was provided for three government urban environmental services

improvement programs. Preliminary estimates are that over 300,000 people benefited from these programs. This component successfully assisted Tunisia to continue to meet pressing urban environmental needs while gradually increasing the role of the private sector.

Evaluation of overall results is complicated by USAID's decision (for reasons not related to the program) to curtail US inputs after four years, instead of the six originally planned. While all grant funds, even greater than those originally planned, were provided, HG funds declined from \$50 million to \$40 million. Because the program involved a number of pilot projects, all of which suffered delays, and the introduction of new concepts, it was to be expected that outputs after four years of implementation would be mixed.

Nevertheless, it is very clear that there has been an evolution in the thinking of Tunisian authorities and acceptance of an expanded role for the private sector in the provision of urban environmental services. This has already been translated into an increase in the use of the private sector, especially in the collection of solid waste. As a major part of the program's purpose, this must be counted as a significant result for which the program can claim clear credit.

When this Program was designed and initiated, the policy, institutional, and legal framework for private sector participation in urban environmental services was not well developed. The program, through numerous studies, technical assistance, and support for institutional development and pilot projects, directly contributed to an evolution in this situation. It opened the door to a substantially greater role for the private sector, especially in the solid and liquid waste sub-sectors. The slower progress thus far in the land development sub-sector is cause for concern, however, even if understandable.

One other comment is appropriate. Review of the 1993 USAID Project Paper shows that considerably more attention was devoted to describing the pilot projects and their expected results than the changes desired in the finance and community participation components and the ways these might be brought about. This was because efforts to strengthen the financial institutional structure, especially involving support for the Caisse des Prets et de Soutien aux Collectivites Locales (CPSCL) were only just beginning under USAID's Municipal Finance Development Program (HG-004D), its Local Government Support Program (LGSP), and the World Bank's First Municipal Development Program (PDM-1). With respect to community participation, this also reflects the innovations of this program's effort in Tunisia.

Four of five End of Project Status indicators were achieved. In addition, a number of the anticipated Project Outputs set forth in the Project Paper have been achieved. Nevertheless, there are significant differences in the results obtained in the four project objectives specified in the PACT (Policy Action and Cooperation Timetable). The number of implementing institutions further complicates an effort to draw general conclusions. It is therefore important to examine each objective separately.

3.2 Achievement of Program Objectives

The program concentrated its activities largely in the fields of solid waste, liquid waste, and land development. There were also activities in community participation and financing. All activities were designed to contribute to the achievement of the program's four broad objectives. The evaluation will assess whether this took place.

The first PACT objective of increasing private sector involvement in the provision of environmental services in poorly serviced low income residential areas was quite successful with respect to solid waste collection and wastewater. Pilot projects are underway in solid and liquid waste. Participation of the private sector in municipal solid waste collection achieved remarkable progress during the last year of the project. However, progress in land development and landfills has been slower

The land development sub-program deserves special attention. The first annual progress review in 1994 noted that the El-Matar pilot project was much more complex than those planned in the other sub-sectors. Not only is El-Matar more complex, because land development is generally more complex and more difficult politically, but, in addition, El-Matar is a very large land development project. This pilot project and sub-program, as well as questions concerning landfills, will be examined in more detail later in this report.

Concerning the second PACT objective, progress has been made in reducing subsidies to ONAS for operational costs and increasing wastewater tariffs. In addition, a new fiscal code for local authorities has been introduced which should help to make user fees more transparent and authorizes periodic increases in tax rates. The establishment of two government funds, FODEP (Fonds de Depollution), a grant fund, and FOCRED, (Fonds de Credits Environnementaux), a revolving loan fund with subsidized rates, has been helpful in encouraging private sector participation in financing, particularly for companies engaged in solid waste collection. The program assisted in the preparations for Tunisia's first BOT project in wastewater treatment. Should this come to fruition, there will be a significant increase in private sector participation in financing. Finally, the El-Matar land development project is based upon a model of private financing of land development through cost recovery from beneficiaries.

However, on balance, there remains much to accomplish in this objective. Because of the slow nature of evolution in the financial sector this is to be expected. In addition, financing for each particular service requires different responses for each. The original objective had also included provision for examination of the potential for increased private sector participation in the financing of urban environmental services through the development of new private sector financial instruments. While this remains a promising, even likely route, four years have proved insufficient to bring this to fruition. Studies of the potential role of the private sector in financing urban environmental services and land development are only now being completed.

In the third PACT objective, through the activities in the solid and liquid waste sectors, there was substantial reinforcement of public agencies, particularly ONAS and municipalities, as managers of contracts with the private sector. The response by municipalities has been remarkable. The response by ONAS has been also been impressive. From a base of zero at the beginning of the program, it appears likely that ten percent of ONAS activities will be contracted with the private sector at the end of the Ninth Plan in 2001, a period of only eight years.

However, this is a complicated subject. ONAS is a strong and successful public sector operation in a country with a tradition of extensive public sector responsibility for development activities. There needed to be strong and persuasive evidence that Tunisia would be better served by some combination of public/private cooperation in the wastewater sector before authorities could have been reasonably expected to make more than minimal changes. The program has begun to secure this evidence. It is reasonable to expect and to recommend that the government and ONAS accelerate their programs beyond the pilot project stage and beyond what might also be considered the modest figure of ten percent of total operations and maintenance business. During the evaluation, there were indications that no artificial limit would be applied. There were also indications, however, that ONAS intended to only go forward with pilot activities in each of its regions in order to ascertain whether or not the private sector could also be effective outside of Tunis. This would be unfortunate.

With regard to landfills, the structure for their management remains to be finalized, although the creation of a solid waste department at ANPE (Agence Nationale de Protection de l'Environnement) is an important step toward better landfill operation and management. Nevertheless, without a clear structure in place, and a cost recovery plan also agreed, it is unlikely that there will be significant progress toward use of the private sector, except as contractors. To advance beyond management contracts to private ownership will likely be much more difficult in any case. The question of management structure is expected to be resolved shortly, as it is also a condition for going forward with the World Bank's Second Municipal Development Project (PDM-2).

Although the objective did not specifically call for activities to strengthen the private sector itself, other than through making more opportunities available for it, the program did include representatives of the private sector in some activities and it is clear that in certain areas new opportunities and companies were created. Tunisian consulting firms were successfully used and thereby strengthened.

The fourth PACT objective aimed at increasing the level of popular participation in the process of sensitizing the general public to urban environmental issues. It proposed to do this through support for NGO programs and micro-pilot projects. However, the direct use of NGOs proved to be difficult. NGOs are relatively weak in Tunisia and are therefore not well suited to providing the kind of support that the government was seeking. This situation may now be evolving, but it will only do so slowly.

Ultimately, it was decided to undertake a new kind of community participation experiment, GESCOME (Gestion Communautaire de l'Environnement), in two towns, Kasserine and Sousse. This was done under the RHUDO's Local Government Support Program, a separate but associated urban program being undertaken with the government. The programs in Kasserine and Sousse were generally successful (especially that of Kasserine, which received the strong support of the Governor) and are expected to be renamed GCP (Gestion Communale Participative) and replicated in important aspects in PDM-2.

It appears that activities undertaken under the first objective in the solid, liquid, and land development sectors were not linked and did not therefore contribute to the attainment of this fourth objective.

Table 1 provides details concerning the source and application of program funds. Table 2 compares initial estimates and actual final program outputs. Table 3 details studies undertaken in the program. Table 4 presents information concerning ONAS.

3.3 Achievement of RHUDO Strategic Objectives

There has been progress toward achieving results as stated in the RHUDO strategic plan. However, it will probably only be in the next several years that concrete results will be obtained for these particular indicators.

4 Detailed Discussion of Selected Elements of Program

Review of the 1993 USAID Project Paper shows that considerably more attention was devoted to describing the pilot projects and their expected results than the changes desired in the finance and community participation components and the ways these might be brought about. This reflects the design and implementation choice made by USAID and Tunisia to press forward immediately with the pilot projects in the first year and leave for later years many of the activities in these other components. It may also be explained by reluctance on the part of both RHUDO and the government to introduce fundamental changes in these areas without considerably more examination and without significant strengthening of the institutional framework.

4.1 Solid Waste

Solid waste was one of three environmental services that the program concentrated on. This included both solid waste collection, traditionally the responsibility of local authorities, and landfills, whose institutional structure is still evolving. Of the \$3.7 million provided in technical assistance, \$1,003,000 went for activities in this sub-sector.

Solid waste collection has seen a remarkable transformation during the course of

the program. As of April 1997, 43 municipalities have entered into contracts with private firms, compared with zero at the beginning of the program. An additional 17 contracts are currently being negotiated.

The sub-sector benefited from a clear line of responsibility based in local authorities, and from clear national policy in favor of increasing private sector participation through contracting. The program was able to capitalize on this clarity and provide the assistance required to strengthen municipalities to carry out their functions.

The pilot project that is being carried out in Sousse only got underway in 1997, considerably delayed by the need to re-bid it as a result of a failure to follow contracting regulations. This did not, however, delay the replication of the proposed experience by other municipalities, which were able to take advantage of much of the training and technical assistance that accompanied the Sousse pilot project. An impact evaluation was undertaken this year in four of these towns, including the Sousse pilot project, with positive preliminary conclusions.

Controlled landfills were also part of this component. Because of a lack of clarity in the institutional structure for management of landfills, the program cannot be said to have yet attained the same success. Nevertheless, the program, through its various studies, has assisted in identifying the issues. The fact that these are clearly difficult issues that involve questions of cost recovery and whether or not to begin to create a structure similar to ONAS for landfills, helps to explain why it has taken so long to come to grips with them. A controlled landfill at Jebel Chekir near Tunis is well advanced in construction and it is expected that the government will resolve its institutional concerns as this landfill is completed and begins operation. Whether or not this type of activity will eventually be met with greater private sector participation, apart from management contracts remains an open question, at this point.

4.2 Liquid Waste

Liquid waste was the second of the three environmental services that the program concentrated on. While considerable progress was made in this sub-sector, and the results can only be said to be very successful, it is more difficult to come to an overall assessment of the global impact of the program. The program worked very closely and continuously with ONAS (Office Nationale d'Assainissement), the single major public provider of wastewater services in Tunisia. Of the \$3.7 million in technical assistance, \$922,000 was expended in this sub-sector.

After a number of years of detailed preparation, assisted by the program, ONAS signed a contract with a Tunisian-French company to manage 150 kms of its wastewater system in Tunis, serving approximately 40,000 people. A second contract with a private company to manage three wastewater treatment plants will be signed shortly. The program has also helped ONAS prepare for its first private BOT concession, which is expected to be undertaken with assistance from the World Bank. These are all major

changes for ONAS.

ONAS continues to pursue its national goal of providing wastewater services to the entire country. During the 8th Plan, from 1992-1996, ONAS was able to extend its coverage from 80 towns to 111 and increase its national network from 4,800 kms to 5,500 kms. It was able to accomplish this while at the same time decreasing its dependence upon the government for subsidies for its operating costs. This is a very credible performance. Table 5 provides additional information as well as current estimates for the 9th Plan.

At the end of the 9th Plan, ONAS has estimated that it will have undertaken an additional six pilot projects with the private sector for operation and maintenance of its sewerage networks and an additional six pilot projects for operation and maintenance of treatment stations. However, at the same time, ONAS estimates that it will have grown from 50 to 80 purification stations and to a network length of 10,000 kms.

If this happens, it is possible that at the conclusion of the 9th Plan, in the year 2001, eight years after the initiation of PPES, ONAS will still be providing at least 90% of its services through its own workforce, not through the private sector, especially if it restricts its next efforts to smaller pilot projects in its regional operations. On the other hand, it can also be said that ONAS will have increased the role of the private sector from zero to ten percent in eight short years. This is a significant achievement. And, if the BOT operation planned for Tunis is underway by that time, this will, by itself, change the wastewater equation dramatically because of its size.

4.3 Land Development

The third of the environmental services focused upon was that of land development. While different from the other two, the justification given for including land development was that it concerned the provision of all other environmental services, including water and wastewater, and that this sub-sector would benefit from increased participation of the private sector. An additional expected benefit was that support was intended to focus on public-private partnerships involving municipalities and that this would support the government's decentralization policy. Of the \$3.7 million in technical assistance funds, \$351,000 went for activities in this sub-sector. While this amount of resources is considerably lower than those devoted to solid waste, landfills, and liquid waste, this appears to have been a result of the lower financial requirements and the slower progress made. There was no suggestion on the part of either RHUDO or government officials that resources for the activity had been withheld.

As with other sub-sectors, priority was given in the first year of the project to preparing and initiating a pilot project. In the case of land development, the site eventually selected was that of El-Matar, in Sousse. A number of issues contributed to a long gestation period for this pilot project. These included: the amount of land (146 hectares) to be developed; the difficulty of locating funding for a number of different

kinds of physical operations, including a major channeling of a dry river-bed, which is an environmental hazard on its own; and a number of issues that had to be resolved concerning having the municipality as the coordinating body. The pilot project is now underway on many fronts and construction will probably begin this year. As a major land development project, it is likely to take at least three years to implement. There are, of course, differing views concerning whether the choice of El-Matar as a site was appropriate for a pilot project. On balance, the evaluation believes it would have been better had a smaller and easier physical site been chosen. However, El-Matar had its own advantages, one being that land ownership is known and clear, and another being that the municipality was in favor of the project.

El-Matar's size, new concepts, and cost (\$12 million to be funded from other than project sources) have led to delays on the ground. As more and more attention was devoted to the pilot project, it appears that the need to make progress in the pilot overshadowed the underlying objectives of the broader land development sub-sector. This was understandable, but unfortunate. Unlike the solid waste sub-sector, where there were also problems in the Municipality of Sousse's pilot project, but where other municipalities came forward to embrace the idea of making use of the private sector for their collection services, it does not appear that other municipalities have stepped forward to lead the way in support of the goal of increasing their own role and that of the private sector in land development through public-private partnerships. Nor, although it is not excluded, does the government plan, for the time being, to support this particular type of initiative in its next program with the World Bank, PDM-2. While there is support within the government for proceeding with the project and while resources have been made available to do so within the Ninth Development Plan, it is difficult to escape the conclusion that the Ministry of Interior is not yet convinced that municipalities can or should play this central role. This is connected with considerations on the general pace of decentralization. Without this support, it is unlikely that many municipalities will become more involved at this point in time. The Ministry, understandably, would like to see further progress on the ground and have the chance to evaluate the pilot before proceeding further.

In spite of this, as the program draws to an early close, the El-Matar pilot project can, will, and should continue. It has secured the necessary funding and has engaged the municipality and its staff in a wide-ranging effort. There is little doubt that it will go ahead and in the process will address and solve a number of the most complicated issues that have hitherto proved difficult in the land development context. There is a growing need for the government to come to grips with a shortage of affordable serviced land in urban areas. Putting the municipality at the center of this effort in the area over which it has control is a reasonable way to proceed. There are likely to be a number of municipalities over the next five years that will be able to take advantage of the work begun with the El-Matar pilot project.

4.4 Financing of Environmental Services

This program component aimed, in a modest way, to increase private sector participation in the financing of urban environmental services. It proposed to fund studies of cost recovery and subsidy policies and practices with a view to increasing user payments for services. In addition, the feasibility of seeking financing in capital markets for provision of environmental services was to be examined. The reasoning given was that as the private sector added financial resources, public sector agencies would be able to increase overall coverage levels.

The Tunisian strategy over the past four years, supported by the Program, has been to seek a significant increase in private sector participation in the financing of environmental services only when the public sector (in this case municipalities, ONAS, and several central government Ministries) was better able to manage solid and liquid waste operations, and land development, sufficiently well for them to be equal partners with the private sector. Other more general steps taken were the passage of a new investment code in 1994 and the activation of two new subsidy funds (FODEP and FOCRED) designed to encourage private sector investment.

Two of the three environmental services directly supported by PPES are being undertaken by municipalities, i.e. solid waste and land development. During the course of the Program, a number of important steps were taken to strengthen local authorities under USAID's Local Government Support Program and HG-004D, and also within the World Bank's PDM-1 program. Importantly for the future financing of municipal environmental programs, considerable work was done with the Caisse des Prets et de Soutien des Collectivites Locals (CPSCL). The CPSCL became, during the 8th Plan, a very effective intermediary for government funds, through either loans or grants, to pass to local authorities. These funds were entirely raised from the government, which in turn had raised them with either the World Bank, USAID, or other donors. During this same period the Caisse raised the interest rate that it charged to local authorities from 2% to 6.5% for projects within the approved Plan d'Investissements Communaux (PICs).

The stage is now set for the Caisse to begin to raise additional funds on the commercial markets if it so wishes. Under the World Bank's PDM-2, it has been agreed that the Caisse will continue to raise its interest rates to local authorities, to 7.5%, and to 8.5% for commercially viable projects. The funds that the World Bank will provide, \$80 million during the 9th Plan, will help the Caisse to meet its needs for financing local authority investment plans (Plans d'Investissements Communaux - PICs). However, it is unlikely that there will be sufficient government or other lower interest funds to finance all commercially viable projects outside the PICs. These could include major infrastructure projects for land development of the type being proposed in El-Matar. It could also include other municipal projects that are clearly commercially viable. These projects could be funded at commercial rates through funds borrowed by the Caisse on the market. There is nothing to stop this from happening and every reason to hope that the Caisse will begin to "test the waters" and act more vigorously.

The approach taken over the past four years reflects a decision by the government to turn to the private sector for financial assistance in resolving environmental problems only when it is able to present well designed projects and when it is unable to find financing from donors. This was not an unreasonable position for the government to take. Above all, it was a realistic position. The evaluation believes that there should now be recognition that this approach is ready to be changed and should not wait until the 10th Development Plan, some four years from now.

4.5 Community Participation

The Program aimed to increase the level of popular participation in the process of sensitizing the general public to urban environmental issues. This was to be accomplished through support for NGO programs, including NGO participation in some of the pilot projects that were to be implemented. NGOs were also to prepare and implement micro-projects on their own.

This approach quickly ran into difficulty in the first year of the Program. A conference that was to have involved NGOs and the Ministry of Environment planned for 1994 to discuss urban environmental issues did not take place because the Ministry believed that the subjects to be covered had already been widely discussed. In addition there were few NGOs capable of taking the sustained actions that would have been required under the program. USAID would have preferred an approach to strengthen environmental NGOs, but an agreement for doing this was not reached. The evaluation believes it fair to conclude that there were fundamental differences in American and Tunisian views of the role of independent NGOs in the development process at that time. The result was that little was accomplished directly with NGOs.

Eventually, under the LGSP Program associated with PPES, a way was found to try on a pilot basis a new approach for involving the community, with NGOs handling the finances. However, the role envisaged for NGOs in the original project paper is unlikely to materialize for some time to come. This pilot approach, carried out in Kasserine and Sousse, under the aegis of the GESCOME program and with support from PPES and LGSP, was examined and evaluated separately, in 1996, with positive conclusions.

In these two cities, advisors worked with city officials, NGOs, community groups and quasi-official neighborhood committees, to identify environmental problems and then propose solutions. In all 50,000 Dinars was made available for the two towns. The projects were successful, especially in Kasserine. The 1996 evaluation noted that the impact of the programs had been quite limited and urged that the program be expanded by the government. Indeed, this is one very good example of how a pilot project can lead to a full-scale program. Negotiations between the government and the World Bank have now resulted in a commitment to replicate the program, albeit modified in some ways, under the upcoming PDM-2.

5 Sustainability of Program Achievements

5.1 Assessment of Sustainability

For the purpose of this review, the scope of work defined sustainability as the existence of an institutional capacity within the Tunisian government to undertake (with support from the private sector and NGOs) the objectives of the PPES program in the absence of foreign assistance.

With this definition in mind, this evaluation concludes that only program activities concerning the collection of solid waste and the operation and maintenance of urban wastewater networks are sustainable. Other activities that were carried out under the aegis of the first objective are still underway. Similarly, achievement of sustainability of the other objectives is underway.

Landfill management and the establishment of BOTs still will require foreign technical assistance and are therefore not yet sustainable. The role of the private sector in land development is already quite substantial, but faces mounting problems of finance and availability of land, both of which tend to disadvantage disproportionately lower income households. Increased involvement of the private sector in local development programs under the aegis of local authorities would seem to be difficult in the absence of resolution of these fundamental questions. This is unlikely to occur without further foreign assistance.

One general comment that has been made is that the presence of foreign assistance in some cases may be useful if it encourages decisions to be taken that might not otherwise be taken were the situation to be entirely domestic in nature. In many instances there may be an internal debate within the institution or department concerning the actions to be taken or the policies to be adopted. Foreign assistance, precisely because it is viewed as external and sometimes more objective, is sometimes able to influence decisions more effectively than would local assistance. This is not always the case and striking the proper balance is crucial.

The issues concerning the enhancement of the participation of the private sector in the provision of environmental services in Tunisia do not, in most instances, involve either private sector technical competence or public sector political will. Rather, they involve the creation of a proper institutional framework and policies that will permit the private sector to operate profitably and will convince public sector organizations that they have something to gain from collaborating with the private sector. Nevertheless, it should also be noted that the project did encourage the creation and use of local consulting firms and private firms dealing with environmental projects.

With regard to the other three program objectives, i.e. community participation, greater private sector financial participation (to which there has already been reference above with regard to BOTs and the CPSCL), and the strengthening of public sector institutions to manage the private sector, the conclusion of this evaluation is that the first two are not yet sustainable, and the third varies depending upon which public sector institution and which function is being discussed.

5.2 Actions Recommended to Encourage Sustainability

Program Coordination: The coordinating committee, and in particular the execution committee and working groups contributed significantly to progress. It is recommended that this structure or a similar structure be maintained as a model to increase dialogue among sub-sectors and as a means to further progress in increasing private sector participation. As the Coordinating Committee itself recognized, it would be useful if the level of representation, i.e. higher ranking officials, at this Committee were elevated. It is recommended that representatives of the private sector be invited to participate at an appropriate level. Similarly, for certain issues, it would also be appropriate to invite representatives of NGOs. In the short term, it would also be helpful if USAID were able to find a way to continue to participate in this coordination structure in order to assist in the continuing evolution of government policies and the successful conclusion of pilot project activities.

Program Policies: Increased participation of the private sector in the provision of environmental services needs to be extended beyond the pilot project stage in order to consolidate the progress achieved. This is particularly true for ONAS. Ambitious goals for the 9th Plan need to be established. Special attention needs to be given to land development and private sector financing. CPSCL should be encouraged to approach the commercial markets for an initial borrowing.

6 Lessons

The political commitment of the government to the increased use of the private sector has been essential to the success achieved thus far. It is not, however, a condition sufficient to ensure success.

Although there is a general commitment to greater use of the private sector, Tunisia has been well served by the achievements of its public sector in the domain of environmental services, especially those of water, electricity, and wastewater. As with any institution or set of institutions, there needs to be continuous examination of goals and means. This has happened with regard to the tourist, fishing, and transportation industries, which have been privatized in important ways, and other parts of the economy, and will happen with regard to environmental services.

The approach chosen for the Program had both positive and negative aspects. It was one designed to introduce change slowly and in accordance with Tunisian

institutional constraints. It was a sensible approach. Whether or not the private sector could respond to the challenge of Tunisian conditions needed to be given a fair test. This is being accomplished in good faith. The downside of this deliberate approach is that its very slowness may mean that it is not possible in certain situations to build momentum for the use of the private sector. That may discourage interest from entrepreneurs.

The use of pilot projects has a number of advantages, but it can also have disadvantages. It can be susceptible to extended delays. This is what happened. The end result is that the project is closing before there are very many concrete outputs. Its advantage is that it allows many problems to be addressed and, hopefully, resolved under actual conditions.

A studies, pilot projects, and evaluations approach will establish the worth or the absence of worth under known conditions. More fundamental decisions would have been needed to move beyond the pilot project stage to achieve greater real growth in the presence of the private sector. A longer-term perspective, probably on the order of ten to twenty years with specific performance level indicators for the percentage of participation by the private sector, would have been needed. This could not have been done in 1992/1993. However, it can and should be done now, in 1997, for the 9th Plan. It is now appropriate to move from a pilot project approach.

Public-private partnerships with an array of organizations in different sectors are clearly going to yield a range of results and lessons. In Tunisia, sewerage is a sector with a successful public sector provider. Given the general national policy to increase the role of the private sector, ONAS needed to be convinced that using the private sector could help it to meet its goals more efficiently. This is being accomplished. Although ONAS has not yet decided to go beyond a very deliberate pilot project approach, there is every reason to believe that within the next several years it will. It should be firmly encouraged to do so. Pilot projects in each of the regions may be appropriate but should be accompanied by a vigorous expansion of the use of the private sector in Tunis, Sfax, and Sousse.

Solid waste and land development are quite different from liquid waste. The focus of program efforts in solid waste and land development, on the public sector side, were the municipalities. Most municipalities are still in need of human resource assistance and are only slowly going to improve their efficiency and increase their responsibilities.

Trash collection has always been a local responsibility. However, in most places it has not been very efficient. The project approach to strengthen municipalities and to work out ways that municipalities could better manage the private sector seems to have worked well. There was also strong central government support for the use of the private sector.

Land development with the municipalities at the focal point does not, on the other

hand, have this same tradition in Tunisia. Furthermore, it is somewhat ahead of where current decentralization practice has reached in Tunisia. As such, it is clear, in hindsight at least, that from the beginning this was not going to be easy. Added to that is the fact that land development, in and of itself, is never easy when it involves upgrading and land ownership issues. And added to that is that the pilot project site chosen was probably one of the most difficult in Tunisia. The lesson here seems quite clear. Of the three constituent parts of any program, i.e. general policy acceptance, complexity of subject matter, and suitability of pilot site, at least one and preferably more should be relatively simpler and easier. As stated earlier, the size and complexity of the pilot project came to dominate this component. That also was to be expected, given the lack of real acceptance by policy makers and municipalities themselves of the need for their intervention at this point.

Nevertheless, the needs are there and continue to be there. Avoidance of them altogether would have been easy but would not have been right in this final USAID program in Tunisia.

With regard to the participation of the private sector in the financing of environmental services, the institutional context needed to evolve from where it was in 1992-1993, especially with regard to financing of municipal programs by the CPSCL.

Tunisia's approach to financing the provision of environmental services has largely been a public sector approach, making use of the limited finances of the State. The results have been positive but also perhaps slower in coming than they might have if private sector financing had been available and had been used effectively in combination with the public sector. The government has recognized this and has moved, in a deliberate way. The CPSCL has been strengthened, as have a number of local authorities. Over the next several years, there can be projects to finance in land development and commercially viable municipal investments. It is recommended that rather than waiting until the 10th Plan and continuing to depend upon external donors, the CPSCL should familiarize itself now with the commercial markets and undertake a borrowing within two years.

Community participation and NGOs also deserve special mention. Centralized direction and control have a strong tradition in Tunisia. Consultation with the local population also has a place in Tunisia's history. Reconciliation of the two in an evolving political and economic situation and within the context of decentralization remains an important challenge.

Interest of the private sector in participating in the provision and financing of environmental services will happen when financial returns are commensurate with risks. Interest of the public sector in having the private sector participate will happen as and when confidence is established that the job can be done and that the results are in Tunisia's overall interests. Parochial interests may well lengthen this process but will probably not derail it. This program has reduced the risks for participation by the private

sector and therefore increased the likelihood that it will take place. It has also increased public sector confidence that results are likely to be positive. In sum, in addition to achieving positive and real results, the project has fundamentally helped to change attitudes in Tunisia.

Table 1
Source and Application of Grant Funds for PPES Program
(\$ '000)

	PPES¹	LGSP²	DSP³	PEP⁴	UP⁵	GOT⁶	Totals
General	303	90	51	0	215	103	762
Liquid Waste	451	30	196	202	43	0	922
Solid Waste	683	171	149	0	0	0	1003
Land Development	174	0	0	0	49	128	351
Community Participation	0	309	0	0	0	0	309
Uncommitted	0	0	0	0	0	369	369
Totals	1611	600	396	202	307	600	3716

¹ PPES - Private Provision of Environmental Services

² LGSP - Local Government Support Program

³ DSP - Democracy Support Program

⁴ PEP - Private Enterprise Promotion Program

⁵ UP - Office of Environment and Urban Programs/AID/W and G/ENV PRIDE Project

⁶ GOT - Government of Tunisia through the Commodity Import Program

Table 2
Summary of Program Achievements

Description of Activity That Program Intended to Impact	Target at Beginning of Program	Actually Achieved at Conclusion of Program
Percentage of Urban Environmental Services (UES) Delivered by Private Sector	1%	<1% (Including Land Development)
Private Sector Investment in Delivery of UES	TD 1,000,000	>TD 1,000,000
Percentage of Urban Population with Sewer Service Coverage	60%	60%
Functioning Performance Monitoring Capacity	Units in Central Agencies and at least two municipalities	Units in ONAS, ANPE, Sousse and Monastir
Participation by Neighborhood Groups and Businesses in Investment Planning	At Least One Municipality	Associated with Process in Kasserine
National Strategies for Increased Private Participation	Strategies Completed and Available for Liquid and Solid Waste Management	Strategies Adopted in Ninth Development Plan
Business Opportunities for the Private Sector	At Least One New Business in Each Sector is Created	Accomplished in Solid Waste and Wastewater
Standard Contracts and Performance Standards for Private Franchises	Completed and Available	Accomplished, and in use in more than ten municipalities
Pilot Projects in Wastewater, Solid Waste, and Land Dev.	Pilot Projects Established	Accomplished, including 43 in Solid Waste Collection
Awareness Building for Popular Participation	10 Seminars, Conference, and Round Tables	2 Seminars, 1 Roundtable, 1 Conference, 2 Training/Trainers
Private Sector Incentive Structures	Structures and Entry Support Incentives Available	Investment Code Established including Tax Incentives for Environmental Equipment
Cost Recovery and Subsidy Policies	Policies Improved and Applicable Nationwide	Cost Recovery Study for Solid Waste Completed. Modest Reductions in ONAS subsidies
Upgrading Programs	33,000 Households and 171,600 People	More than 300,000 beneficiaries
Sites & Services Programs	17,000 Households and 88,400 People	Government Did Not Submit Expenditures for this Program
Loan Funds for Program	\$50 Million in Housing Guaranty Loans	\$40 Million in Housing Guaranty Loans
Grant Funds for Program	\$3.6 Million in Grants	\$3.7 Million in Grants

Table 3

Studies Undertaken in the Program

General

Preparation of Urban Development Monitoring Unit

Liquid Waste

Liquid Waste Market Study

Private Sector Strategy

ONAS Performance Monitoring Unit

Norms and Standards

Model Contract for Networks and Treatment Plants

Training Plan for Liquid Waste

Training Course on Contract Management

Non-ONAS Municipalities

BOT Feasibility

Impact Study of Pilot Project

Solid Waste

Solid Waste Market Study

Private Sector Strategy

Solid Waste Performance Monitoring Unit

Norms and Standards

Course Development and Training of Trainers for Solid Waste Collection

Solid Waste Pilot Project Feasibility Study

Landfill Pilot Project Feasibility

Training Plan for Solid Waste

Solid Waste Training Courses on Contract Management

Cost Recovery Study

Pilot Projects Evaluation and Impact Study

Training Course on Landfill Operations

Land Development

Study Tour to Morocco

Municipal and Private Land Sector Management

Land Management Legislation and Processes

Cost Recovery and Payment Procedures for El-Matar

Finance

Private Sector Infrastructure Financing Study

Land Development Financing Facility Study

Community Participation

Study Tour to USA

Environmental NGO Strategy

CIMEP Project Document

CIMEP Activities

Micro-Projects in Sousse and Kasserine

Table 4
ONAS

	1991	1996	2001 (Estimated)
Total Urban Population Tunisia (millions)		5.8	6.6
Number ONAS Towns	80	111	150
Total Number Towns	257	257	257
Population ONAS Towns (millions)	3.6	4.4	5.1
Coverage Rate in ONAS Towns	75%	78%	80%
Coverage Rate All Towns	56%	60%	65%
Coverage Rate All Tunisia		39%	50%
ONAS Household Users	430,000	630,000	850,000
Network Length (kilometers)	4,800	7,100	10,000
Private Sector Operations (kilometers)	0	150	1,000
Private Sector Contracts (Operations and Maintenance)	0	1	7
Pumping Stations	190	284	320
Sewage Treatment Plants	25	50	80
Private Sector Contracts	0	1	7
Potable Water Distributed (millions m³)		238	266
Wastewater Collected (millions m³)	106	133	160
Percentage Collected		55.8%	60%
Wastewater Treated (millions m³)	90	125	152
Percentage Treated	85%	93%	95%
Employees	2,800	4,160	5,000

Sources: USAID and ONAS